UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

52989

7590

11/05/2008

Dickinson Wright PLLC James E. Ledbetter, Esq. International Square 1875 Eye Street, N.W., Suite 1200 Washington, DC 20006 EXAMINER

CHEN, TIANJIE

ART UNIT PAPER NUMBER

2627

DATE MAILED: 11/05/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/591,594      | 09/05/2006  | Hidehiko Oota        | L5085.07112         | 3384             |

TITLE OF INVENTION: CHUCKING APPARATUS

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1510        | \$300               | \$0                  | \$1810           | 02/05/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

| appropriate. All further indicated unless correct maintenance fee notifica   | ed below or directed otl  | ng the Patent,<br>nerwise in Blo  | advance o   | rders and notification a) specifying a new o  | of n  | naintenance fees w<br>pondence address;   | vill be a<br>and/or                               | mailed to the current (b) indicating a separ  | corresponde<br>ate "FEE A   | nce address as<br>ADDRESS" for   |
|--|---|---|---|---|---|---|---|---|---|--|
| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)   |   |   |   |   | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.   |   |   |   |   |  |
| 52989  | 7590 11/05  | 5/2008  |   |   | nare  |   |   |   | nission   |  |
| Dickinson Wright PLLC<br>James E. Ledbetter, Esq.<br>International Square  |   |   |   |   | Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. |   |   |   |   |  |
| 1875 Eye Street, N.W., Suite 1200<br>Washington, DC 20006  |   |   |   |   | (Depositor's name)  |   |   |   |   |  |
| washington, DC   | 20000   |   |   |   |   |   |   |   |   | (Signature)  |
|  |   |   |   |   |   |   |   |   |   | (Date)   |
| APPLICATION NO.  | FILING DATE   |   |   | FIRST NAMED INVEN   | NTOR  |   | ATTO:   | RNEY DOCKET NO.   | CONFIRM   | ATION NO.  |
| 10/591,594   | 09/05/2006  |   |   | Hidehiko Oota   |   |   | L5085.07112                                       |   | 33  | 384  |
| TITLE OF INVENTION   | : CHUCKING APPARA   | ATUS  |   |   |   |   |   |   | ,   |  |
| APPLN. TYPE  | SMALL ENTITY  | ISSUE FE  | E DUE   | PUBLICATION FEE I   | DUE   | PREV. PAID ISSU   | E FEE   | TOTAL FEE(S) DUE  | DA  | TE DUE   |
| nonprovisional   | NO  | \$151   | 10  | \$300   |   | \$0   |   | \$1810  | 02/   | /05/2009   |
| EXAM   | IINER   | ART U   | NIT   | CLASS-SUBCLASS  | S   |   |   |   |   |  |
| CHEN, T  | ΓΙΑΝJIE   | 262   | 7   | 720-707000  |   |   |   |   |   |  |
| ☐ "Fee Address" ind  |   | " Indication foned. Use of a C  | orm<br>Customer   | (1) the names of or agents OR, alter (2) the name of a registered attorney 2 registered patent listed, no name with the DATENT (wint).  | rnativ<br>single<br>y or a<br>t attor<br>ill be   | vely, e firm (having as a gent) and the nam rneys or agents. If printed.                                  | membes of up                                      | er a 2  |   |  |
| PLEASE NOTE: Unl   | less an assignee is ident<br>h in 37 CFR 3.11. Com  | ified below, n  | o assignee  | data will appear on t   | the paig an a   | atent. If an assign<br>assignment.<br>and STATE OR C  | COUNT   | RY)   |   |  |
| Please check the appropr   | iate assignee category or   | categories (w   | ill not be p  | rinted on the patent):  |   | Individual 🖵 Co   | orporati  | on or other private gro   | up entity   | Government   |
| 4a. The following fee(s)   | are submitted:  |   | 4   |   |   | se first reapply ar   | ıy prev   | iously paid issue fee s   | hown abov   | e)   |
| Issue Fee  | T 11 11   | to D  |   | A check is enclosed.  |   |   |   |   |   |  |
| ☐ Publication Fee (No small entity discount permitted)☐ Advance Order - # of Copies  |   |   | _   | Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). |   |   |   |   |   |  |
| 5. Change in Entity Sta  | tus (from status indicate   | d above)  |   | overpayment, to   | Беро  | sit recount rumo  |   | (cherose ar   | ский сору   | or uns rorm).  |
| **   | s SMALL ENTITY state  |   |   |   |   | -   |   | TTY status. See 37 CF   |   |  |
| NOTE: The Issue Fee an interest as shown by the  | d Publication Fee (if req<br>records of the United Sta  | uired) will not<br>ites Patent and  | be accepte<br>Trademarl   | ed from anyone other to<br>COffice.   | han tl  | ne applicant; a regi  | stered a  | ttorney or agent; or the  | assignee o  | r other party in   |
| Authorized Signature   |   |   |   |   |   | Date  |   |   |   |  |
| Typed or printed name  |   |   |   | Registration No   |   |   |   |   |   |  |
| This collection of inform<br>an application. Confiden<br>submitting the complete<br>this form and/or suggesti<br>Box 1450, Alexandria, V<br>Alexandria, Virginia 223 | tiality is governed by 35 d application form to the ions for reducing this bu virginia 22313-1450. DO | CFR 1.311. The<br>U.S.C. 122 and<br>USPTO. Time<br>rden, should be<br>ONOT SEND | e informati<br>nd 37 CFR<br>ne will vary<br>e sent to th<br>FEES OR | on is required to obtain 1.14. This collection when the depending upon the le Chief Information COMPLETED FORM  | n or reis est<br>indiv<br>Office<br>IS TO   | etain a benefit by t<br>imated to take 12 t<br>idual case. Any co<br>r, U.S. Patent and<br>D THIS ADDRESS | he publ<br>minutes<br>omment<br>Tradem<br>S. SENI | ic which is to file (and<br>to complete, including<br>s on the amount of tin<br>ark Office, U.S. Depa<br>D TO: Commissioner f | by the USP<br>g gathering,<br>he you requirtment of Co<br>or Patents, I | TO to process) preparing, and ire to complete ommerce, P.O. P.O. Box 1450, |

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.     | FILING DATE    | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|---------------------|----------------|-------------------------|---------------------|------------------|--|
| 10/591,594          | 09/05/2006     | Hidehiko Oota           | L5085.07112         | 3384             |  |
| 52989 75            | 590 11/05/2008 |                         | EXAM                | INER             |  |
| Dickinson Wrigh     | t PLLC         | CHEN, TIANJIE           |                     |                  |  |
| James E. Ledbetter  | , Esq.         | ART UNIT                | PAPER NUMBER        |                  |  |
| International Squar |                |                         | 2627                |                  |  |
| 1875 Eye Street, N  |                | DATE MAILED: 11/05/2008 |                     |                  |  |
| Washington DC 26    | NANA           |                         |                     |                  |  |

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 192 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 192 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|   | Application No.  | Applicant(s)  |                         |
|---|--|---|-------------------------|
|   |  |   |                         |
| Notice of Allowability  | 10/591,594<br>Examiner   | OOTA, HIDEHIKO Art Unit   |                         |
| •   |  |   |                         |
|   | Tianjie Chen   | 2627  |                         |
| The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI                        | (OR REMAINS) CLOSED or other appropriate coming IGHTS. This application is | in this application. If not included nunication will be mailed in due course. <b>TI</b> | <b>HIS</b><br>iitiative |
| 1. This communication is responsive to <u>08/15/2008</u> .  |  |   |                         |
| 2. The allowed claim(s) is/are <u>2-20</u> .  |  |   |                         |
| <ul> <li>3.  Acknowledgment is made of a claim for foreign priority under a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> </ul> | e been received.   | , ,,  |                         |
| <ol><li>Copies of the certified copies of the priority do</li></ol>   | cuments have been receiv   | red in this national stage application from t   | :he                     |
| International Bureau (PCT Rule 17.2(a)).  |  |   |                         |
| * Certified copies not received:  |  |   |                         |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |  | ile a reply complying with the requirements   | S                       |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm<br>INFORMAL PATENT APPLICATION (PTO-152) which give  |  |   | F                       |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") mus  | st be submitted.   |   |                         |
| (a) $\square$ including changes required by the Notice of Draftspers  | son's Patent Drawing Revi  | ew ( PTO-948) attached  |                         |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date  | •  |   |                         |
| (b) ☐ including changes required by the attached Examiner's<br>Paper No./Mail Date  | s Amendment / Comment  | or in the Office action of  |                         |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t  |  |   |                         |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT   |  |   |                         |
|   |  |   |                         |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892)   | 5 ☐ Notice of  | Informal Patent Application   |                         |
| 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  |  | Summary (PTO-413),  |                         |
| 3. ☐ Information Disclosure Statements (PTO/SB/08),   | Paper No   | o./Mail Date 's Amendment/Comment   |                         |
| Paper No./Mail Date   |  |   |                         |
| 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material  |  | 's Statement of Reasons for Allowance   |                         |
| Tianiia Chan  | 9.   | ·   |                         |
| /Tianjie Chen/<br>Primary Examiner, Art Unit 2627   |  |   |                         |
|   |  |   |                         |

Application/Control Number: 10/591,594 Page 2

Art Unit: 2627

## REASONS FOR ALLOWANCE

1. Claims 2-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

• With regard to claims 2-4, 19, and 20 as the closest reference of record, Otsubo et al (US

6,041,033) discloses a chucking apparatus in Figs. 1-7 in which a plurality of pawl bodies 126 are

provided in a radial direction of a hub body 125 of a turntable such that the pawl bodies can

move, and a center hole of a disk 23 is pressed by the pawl bodies to hold the disk (Fig. 7),

wherein the chucking apparatus comprises a resilient member 127 for biasing the pawl

bodies outward of the hub body, each of the pawl bodies includes a pawl portion 126d which

comes into contact with the disk, and a pawl-side stopper 126a for limiting outward movement of

the pawl bodies caused by the resilient member (Column 6, lines 31-34), the hub body includes a

pawl opening 125a (Fig. 5C) through which the pawl portion can project outward, and a hub-side

stopper 125b (Figs. 5A and 6) which abuts against the pawl-side stopper, a downward guide

surface 126b is provided at a location lower than a tip end of the pawl portion, the hub body is

provided with an upper receiving surface 122 at a position opposed to the downward guide

surface, and the pawl portion is pressed from above so that the downward guide surface slides

along the upper receiving surface and the pawl portion moves inward (Figs. 6 and 7); but fails to

**show** a surface extending downward from the tip end of the pawl portion is a disk holding

surface, and the downward guide surface is provided on a side portion of the disk holding surface.

With regard to claims 5 and 7, Otsubo et al fails to show that the downward guide surface

comprises at least a first inclined surface and a second inclined surface, if the pawl portion is

pressed from above by the disk, the first inclined surface is a surface against which the upper

receiving surface abuts when a tip end of the pawl portion is inserted into a center hole of the disk

or before the tip end of the pawl portion is inserted into the center hole of the disk, the second

Art Unit: 2627

inclined surface is a surface against which the upper receiving surface abuts after the tip end of the pawl portion is inserted into the center hole of the disk, an angle formed between the second inclined surface and a pressing direction is smaller than an angle formed between the first inclined surface and the pressing direction.

- With regard to claim 6, Otsubo et al **fails to show** that an inner side guide surface comprising an inclined surface which gradually becomes higher toward a center of the hub body is provided on an inner side of the pawl body, the inner side guide surface comprises at least a first inclined surface and a second inclined surface, if the pawl portion is pressed from above by the disk, the first inclined surface is a surface against which the pawl-side stopper abuts when a tip end of the pawl portion is inserted into a center hole of the disk or before the tip end is inserted into the center hole of the disk, the second inclined surface is a surface against which the pawl-side stopper abuts after the tip end of the pawl portion is inserted into the center hole of the disk, an angle formed between the second inclined surface and a pressing direction is smaller than an angle formed between the first inclined surface and the pressing direction.
- With regard to claim 8, Otsubo et al **fails to show** that the upper receiving surface comprises at least a first inclined surface and a second inclined surface, if the pawl portion is pressed from above by the disk, the first inclined surface is a surface against which the downward guide surface abuts when a tip end of the pawl portion is inserted into a center hole of the disk or before the tip end is inserted into the center hole of the disk, the second inclined surface is a surface against which the downward guide surface abuts after the tip end of the pawl portion is inserted into the center hole of the disk, an angle formed between the second inclined surface and a pressing direction is smaller than an angle formed between the first inclined surface and the pressing direction.

• With regard to claims 9-18, Otsubo et al fails to show that a surface extending downward from a tip end of the pawl portion is a disk holding surface, and the downward guide surface is provided on a side portion of the disk holding surface, the pawl body is provided with the downward guide surface at a location higher than the disk holding surface or at a location of the same height as that of the disk holding surface, a downward receiving surface is provided on the hub body at a location opposed to the upward guide surface, the pawl opening is provided in a range extending from an outer periphery of an upper surface of the hub body to its side surface, a side surface opening width of the side surface is greater than an upper surface opening width of the outer periphery of the upper surface of the pawl opening, the downward receiving surface is disposed on lower surfaces of both side portions of the upper surface opening, and the upper receiving surface is disposed on upper surfaces of both side portions of the side surface opening.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/591,594

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application

Page 5

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

CANADA) or 571-272-1000.

/Tianjie Chen/

Primary Examiner, Art Unit 2627